UNITED
NATIONS

DP

Governing Council
of the
United Nations
Development Programme

Distr.
GENERAL

DP/1990/17/Add.2 (Part I)
28 February 1990

ORIGINAL: ENGLISH

Thirty-seventh session
28 May-22 June 1990, Geneva
Item 4 (a) of the provisional agenda

SUPPORT

PROGRAMME IMPLEMENTATION

ANNUAL REPORT OF THE ADMINISTRATOR FOR 1989

Addendum

COUNTRY PROJECT RESULTS BY REGION

I. ASIA AND THE PACIFIC

1. Most developing countries in Asia and the Pacific, although they suffered a slow-down in economic growth to 6 per cent in 1989, showed per capita growth rates which were considerably higher than those in the industrialized Western countries. One contributing factor was the increase in agricultural production, due largely to improved weather conditions. This was particularly true of India, where agricultural output increased by 20 per cent in 1988 and 1989 after a drought-induced decline in the preceding year.

2. Overall, there was a sharp increase in exports, owing to economic diversification, and a tendency for Governments in the region to open their countries to new foreign investments. Against this backdrop, the United Nations Development Programme (UNDP) will continue to work towards improving productivity in the region through the promotion of new skills and technologies.

Trade promotion

3. UNDP operates a regional programme, one objective of which is to maintain the momentum of export growth in Asia and to encourage its spread. One project under this programme has helped to establish joint ventures between enterprises in Asia and counterparts in the developed world by drawing up and distributing company profiles, arranging contacts between potential partners and organizing workshops. Participating Asian countries are India, Malaysia, the Philippines, Sri Lanka and Thailand. The project, executed by the International Trade Commission (ITC) and

expected to end in 1990, handled 104 proposals, of which over 10 have resulted in firm joint ventures. A further 10 are anticipated. Another ITC-executed regional project is providing consultants on marketing strategies and export development to assist selected leather manufacturers, furniture businesses and printing services in China, Indonesia, Malaysia, Pakistan, the Philippines and Sri Lanka to develop products for export market. This project will continue throughout 1990.

Disaster relief and rehabilitation

4. Several developing countries in Asia and the Pacific also sought UNDP assistance in coping with disaster relief and rehabilitation. In China, following earthquakes in Sechuan province and massive floods in six southern provinces, UNDP, together with the Chinese Government, the Office of the United Nations Disaster Relief Co-ordinator (UNDRO) and the Government of Australia, entered a cost-sharing programme to distribute food, blankets and medical supplies. In Indonesia, UNDP provided building materials after landslides had damaged and destroyed thousands of homes in Irian Jaya. After fires swept a densely-populated area of Beik in Myanmar, leaving some 22,000 people homeless, UNDP helped to obtain chlorine to purify drinking water, and it also provided medical supplies and blankets.

Cross-border action

5. Man-made disasters in the Asian region continue to present a challenge to UNDP. A vital feature of its programme in Pakistan is the Afghanistan cross-border operation, implemented by a number of non-governmental organizations (NGOs). In 1989, UNDP funded eight Afghanistan cross-border projects administered from Pakistan worth $4.15 million. Of this, approximately $500,000 was from the Afghanistan Indicative Planning Figure (IPF), while the remaining $3.65 million was contributed by the United Nations Co-ordinator's Trust Fund for Afghanistan.

6. Activities undertaken in 1989 by NGOs in Afghanistan with UNDP support included: distribution of wheat seed to Afghan farmers; repair of roads, bridges, culverts, drinking water facilities, irrigation and housing in eight provinces; the clearing of mines in Kunar and Paktika provinces; launching of a crop protection programme in the northern provinces; and the implementation of small, community-scale projects such as primary school and health clinic reconstruction, livestock vaccination and poultry breeding.

Combating illiteracy

7. In Bangladesh the great majority of children either never enrol in primary school or fail to complete five full years. As a result, only 3 in 10 adults can claim to be literate. Among women, the literacy rate is under 2 in 10. In 1985, the Government of Bangladesh drew up a plan to increase enrolment and to ensure that the majority of children remained in school for at least five years. To further this aim, a UNDP project has been assisting the Government in improving teacher training and education management, drawing up policy studies, revising curricula and developing better textbooks.

8. Thirty specialists were trained in curriculum development, and 200 officers were trained in primary education management. A revised curriculum is ready for

implementation in 1990 for classes I and II, and groundwork has been completed to develop a curriculum for classes III to V. A follow-up project, beginning in July 1990, will disseminate the new curricula, introduce further reforms and continue teacher training.

AIDS prevention and control

9. The menace of acquired immunodeficiency syndrome (AIDS) in Thailand, as in the rest of the world, has become a problem of great urgency. Research indicates that among intravenous drug users the rate of HIV (human immunodeficiency virus) infection increased from 1 per cent of users in September 1987 to an estimated 30 per cent in October 1988. This is one of the highest known rates of increase in the infection. In view of this situation, the Ministry of Public Health has developed a National Medium-term Plan for the Prevention and Control of AIDS, covering 1989-1991.

10. A UNDP project, executed by the World Health Organization (WHO), supported the first year's work under the National Medium-term Plan. Activities in which the project is assisting include: reduction of the incidence of HIV infection among intravenous drug users, reinforcement of safe sexual behaviour, prevention of HIV transmission through blood and blood products, and treatment of HIV-infected persons. Resources contributed by UNDP include audio-visual material for health education and promotion of public awareness, training of health officials and scientists concerned with AIDS, and subcontracted services for the establishment of therapeutic communities for HIV sufferers. The UNDP contribution to the first year of the Medium-term Plan was $890,000.

Management of wildlife

11. Rapid population growth in India over the past half century, often combined with poor land management, has resulted in severe pressure on wildlife habitat and a large decline in the numbers of almost all forms of wildlife, many of which cannot be found, or preserved, anywhere else in the world. Various measures have been taken by the Government to combat this problem, including the establishment, in 1982, of the Wildlife Institute of India at Dehra Dun, in order to provide trained personnel for national conservation programmes and to furnish a scientific data base for improved management of wildlife resources.

12. From 1983 to 1988 a UNDP project, executed by the Food and Agriculture Organization of the United Nations (FAO), assisted the Wildlife Institute in successfully developing a teaching and research programme and establishing a computerized data base. A second phase of the project, due to be completed in June 1990, is strengthening the Institute's Masters of Science Programme in wildlife biology, helping with the analysis of research data and arranging overseas training for faculty members.

Making use of marine resources

13. The Government of Indonesia, in an effort to ameliorate the depressed economies of the rural coastal communities, embarked on a seafarming project in 1983. With $2.3 million from UNDP and $140,371 from its own budget, the Indonesian

Government sought to exploit its coastal waters, not only to produce more food and boost employment but also to generate foreign exchange through exports.

14. Since the launching of the project, a National Seafarming Development Centre has been set up in Lampung, incorporating a seafarming data base and information system. So far, 4,798 hectares of coastal waters have been utilized for seafarming development, involving a total of 19,670 people - 7,670 on a full-time basis and 12,000 on a part-time basis. Following the Centre's breakthrough in seabass spawning, about 1.3 million seabass fry were distributed to farmers in 1989. At least 29 small-scale operators have begun raising seabass, and it is estimated that by January 1991 up to 500 tonnes of seabass will have been harvested.

15. The Philippines, being an archipelago, has a large number of people dependent on the sea for their livelihood. Five years ago, determined to protect and further exploit the country's marine resources, the Government decided to strengthen, with the help of UNDP, the research and teaching capabilities of the Marine Science Institute of the University of the Philippines at Diliman.

16. This project, due to be completed in 1990, has achieved many positive results. A doctor's degree programme in marine biology has been established, training workshops for researchers and technicians have been conducted throughout the country, and technologies have been developed for the harvesting, culture and processing of various marine species. Some of these technologies are already being used to improve marine husbandry practices among coastal communities.

Integrated rural development

17. About 85 per cent of the 3.9 million citizens of the Lao People's Democratic Republic live at subsistence level and are dependent upon agriculture. Hence, the country's first two five-year development plans (1981-1985 and 1986-1990) stressed self-sufficiency in food, crop diversification and an integrated approach to rural development. The country's mountainous terrain, however, makes many areas inaccessible. The Government has therefore pin-pointed four regions for integrated rural development pilot projects to improve access and develop new agriculture and forestry enterprises, as well as to provide social services.

18. In the first targeted area - the Muong Hom district - a number of significant improvements have been made with UNDP technical assistance. A 40-kilometre dry season road from the Nam Sane Valley to the village of Phalavek in the mountainous region has been completed, along with shorter roads totalling 30 kilometres. To help farmers in even more remote parts to market their produce, the district was supplied with a 20-ton ferry and three outboard-powered canoes, plus nine pack horses and one elephant to transport logs from the forests to the sawmills. Dams and canals were constructed, creating 83 hectares of permanent rice fields. Two rice mills were built to process the grain, and a sawmill was constructed to supply timber for housing. Two multi-purpose surveys of health, veterinary services and local drinking water supplies were carried out in nearly half of the district's villages. UNDP provided $2.24 million while the Lao Government contributed $71,225.



READEX FICHE

Fostering the handicrafts industry

19. The development of the handicrafts industry is important to the economy of Sri Lanka because the industry employs about 60,000 persons, a high proportion of whom are women and people from the rural areas. It is an industry that requires little imported equipment, uses mainly local materials and provides supplementary income for the underemployed and the seasonally employed. In 1983 the Government set up the National Design Centre under the Ministry of Textiles and Rural Industrial Development with the primary objective of upgrading the marketability of Sri Lankan handicrafts.

20. One of the major achievements of the National Design Centre has been the recruitment of a design co-ordinator, seven full-time designers and two consultants. In one year, the Design Department produces more than 1,000 designs, 80 per cent of which are commissioned by producers or marketing enterprises. If not for the recent political disturbances within the country, the percentage of designs taken up by producers would have been greater. A regular annual buyers' and sellers' meeting has been established, which last year attracted 27 producers, 100 trade buyers and 2,000 members of the public.

Extending essential skills

21. Bhutan's Human Resources Development Master Plan, formulated in 1987, has helped to relieve the country's acute shortage of skilled manpower. The Master Plan has promoted overseas fellowships, strengthened indigenous educational and technical institutions, and assisted new in-country training programmes. It was implemented, in part, through UNDP funding of $5.28 million; Bhutan contributed $675,000. In addition, the Government elected to tap into the professional expertise of the United Nations Volunteers (UNV) programme to cope with its lack of skilled manpower. Today, while young Bhutanese are sent abroad for advanced training, the UNV programme continues to provide essential skills.

22. UNV medical specialists have handled 25,000 ophthalmological cases, treated 3,000 children, interpreted 24,000 X-rays and provided obstetric and gynaecological services at Thimphu and Tashigang hospitals. At the same time, Bhutanese are being trained as ophthalmological assistants, radiology technicians, paediatric nurses, midwives and health workers. Training is also being offered in animal husbandry, agriculture, education, road construction and housing.

Training in hydroelectric technology

23. Nepal wants to harness its abundant water resources and is planning to construct hydroelectric dams on its major rivers, but it lacks professional and technical manpower. A study by Nepal's National Planning Commission indicates a need for 1,000 civil engineers for the country as a whole. In the power sector alone, there is an immediate need for 250 civil engineers, especially since the Government is actively considering the Karnali hydroelectricity project in the Far Western Development Region.

24. In July 1980, the first group of 50 students was enrolled in Roorkee University in India for an eight-year engineering course. With $2.68 million from

UNDP, 244 students have completed their studies and six more are expected to finish in 1990.

Conservation of rainwater

25. The 63,000 inhabitants of Kiribati depend solely on rainfall and wells for water. While rainfall is quite abundant and evenly distributed during the rainy season, droughts of several months during the dry season often cause severe water shortages and damage to crops. To meet the water supply needs of its growing population, the Government of Kiribati has initiated a programme to conserve rainfall. Kiribati's Public Works Department is entrusted with the task of co-ordinating water supply projects in the outer islands. UNDP has provided equipment, technical assistance and training.

26. As a result, there is now a catchment system in the outer islands to collect and store water. Each island involved has four people trained in water tank construction, with equipment to produce more catchment systems. Ferro-cement water tanks have been built on 11 islands, and local volunteers help to maintain the systems, including the hand pumps.

## II. AFRICA

27. Sub-Saharan Africa continues to contend with natural and man-made disasters, rising indebtedness, falling export revenues, mounting population, food scarcity and disease.

28. Technical co-operation remains in line with the priority areas identified in the United Nations Programme of Action for African Economic Recovery and Development (UNPAAERD) 1986-1990. Areas of primary focus include agricultural development, the alleviation of external debt, the reduction of unemployment, private sector development, environmental management, women in development, the encouragement of non-governmental organizations and, most importantly, the development of human resources, which UNDP sees as a major component of its programmes in Africa for the next decade.

29. At the regional level, UNDP organized a series of cluster meetings of African planning ministers (four for sub-Saharan Africa and one for North Africa) to build consensus on development policy. Subsequently all of these ministers came together with all of the sub-Saharan resident representatives at a precedent-setting joint meeting in Addis Ababa in April 1989. It was agreed that such continent-wide meetings should be held every two years. UNDP has also continued to organize round-table discussions and sectoral follow-up meetings for several least developed countries in the region, in which all major donors are invited to participate. In addition, UNDP has continued to hold meetings with the main United Nations executing agencies to discuss common objectives and to harmonize policies.

30. Roughly three quarters of the countries in the region have now embarked on some economic and institutional structural adjustment. UNDP is playing a part in assisting the process and in helping countries to make the transition with minimum

hardship. The Structural Adjustment Advisory Teams for Africa, established in July 1989 as a regional project, provide for the training of national staff, particularly in the ministries of finance, who handle the complex analysis and negotiation of structural adjustment packages. A complementary project, which the World Bank executes and jointly funds with the African Development Bank, helps to sustain social services during structural adjustment. This project is expanding rapidly.

31. UNDP supports various other innovative mechanisms to promote development in the region. The Africa Project Development Facility (APDF), formed in 1986, is an example. Another is the African Management Services Company, founded in 1989 to promote improved management of African enterprises. The National Technical Co-operation Assessment and Programmes (NaTCAP) exercises are an increasingly important means for establishing country-wide frameworks for technical assistance, and they are being requested by and extended to a majority of the countries.

32. The 1980s in Africa were characterized as a decade of adjustment, largely without growth. The next decade, it is hoped, will be one of renewed growth and development. UNDP is ready to play its role, and the next two years will involve a great deal of operational follow-up planning.

Special situations

33. One of the most important events for the region in 1989 was the gaining of independence by Namibia, where a UNDP office has been opened in the capital, Windhoek. A country programme will be decided upon by the new government in mid-1990, and UNDP has established a trust fund for development activities.

34. The role of UNDP in areas of acute hardship and disruption remains a significant one. The problems of refugees, displaced persons, famine, desertification and plagues of locusts and migratory birds are all being addressed in various countries. In Ethiopia, for example, UNDP has continued to co-ordinate operations within the Emergency Prevention and Preparedness Group, at the request of the Ethiopian Government, to alleviate the effects of war and famine.

Increasing the productivity of women

35. Through a specially designed package of seven projects - costing $14.4 million and involving at least 17 countries - new ways of raising the productivity of women in key development sectors are being tested. The projects, which are being carried out simultaneously in several participating countries, focus on agriculture, drinking water supply and sanitation, energy and the informal sector, as well as women's access to credit and scientific and technical education. The purpose is to experiment with participatory grass-roots approaches and to communicate the results to government officials and donors on the front line of decision-making. In Nigeria, for example, research carried out under the project is being used to advise both the Government and World Bank officials on how to make agricultural extension services more specific to the needs of women. A Women in Agriculture (WIA) Programme, initiated in a few States, is now nation-wide and is strongly supported by World Bank lending operations. At a recent WIA workshop, three-year

action plans were drawn up outlining in detail the problems women farmers face and ways to alleviate them. These action plans are now being implemented by the Government. News of the Nigerian programme has spread to Kenya, which is gearing up for a similar workshop, possibly involving all east African countries.

Enhancing management capacity

36. A high priority in Africa remains the building of national management and planning capacity, which is recognized as central to the promotion of sustainable development. In Ghana, nearly 70 per cent of UNDP resources are being directed to the planning effort - representing some 23 projects in every major sector - in support of decentralization and the country's economic recovery programme. A number of countries have carried out administrative reforms and training programmes with UNDP assistance.

Putting labour to work

37. In 1987 Nigeria launched a Special Public Works Programme as an emergency employment measure and a means of involving local communities in improving their living conditions. Through a demonstration project supported by UNDP and the International Labour Organisation (ILO), high-level government officials as well as local contractors have been convinced of the merits of labour-intensive construction methods, which not only provide a needed source of employment but save about 40 per cent in foreign exchange costs due to the elimination of heavy imported machinery. Through the project, 70 engineers from five States were trained in both the theoretical and practical aspects of labour-intensive methods through the construction and rehabilitation of rural roads and small-scale irrigation schemes. As a direct result of the project, labour-intensive methods will be incorporated in a major public works programme covering nine States.

Preparing first-time entrepreneurs

38. While unemployment in Zambia is generally high, it is particularly acute among youths and school drop-outs. Each year an estimated 160,000 young persons leave the educational system, with limited hope of being absorbed into the formal employment sector. With technical assistance from the ILO and national consultants, UNDP is helping to identify viable small-scale enterprises for young Zambian men and women and thus to prepare them for self-employment.

39. Since March 1989, three training programmes have been organized for nearly 50 prospective entrepreneurs; 40 have successfully completed the training and are now embarking on new business ventures in traditional and non-traditional areas. To provide start-up capital, loan agreements have been signed with two Zambian banking organizations, opening up a new form of credit for first-time entrepreneurs. An "enterprise education" campaign is also being initiated. Four radio programmes have been aired introducing the self-employment option, and training materials are being prepared for introduction into schools and technical colleges. As a result, nearly 700 inquiries have been received from Zambian young people, of whom 400 have been interviewed or have received advice.

Supporting national consultants

40. Sweeping changes have taken place in Ghana since it launched its economic recovery programme in 1983, involving major policy shifts and economic adjustments. While a large pool of skilled consultants is available in Ghana to help implement these changes, the consultants often lack the experience or expertise to compete with foreign experts, and they are frequently jobless.

41. Since January 1989, a UNDP-supported project has been helping to develop the consulting industry in Ghana, in both the public and private sectors, which is estimated to include some 2,500 professionals in various fields. Three workshops have been conducted so far, resulting in a draft national action plan to develop the industry, which is under review for legislation. A Ghana Association of Consultants has also been formed along with the establishment of consultancy centres in the country's three main universities. Donor agencies and multilateral agencies, including UNDP, are now stepping up their use of local consultants. In ongoing projects supported by UNDP, about 50 per cent of all person-months now approved for subcontract will be filled by local experts. In 1990, special focus will be placed on enhancing opportunities for women professionals in the consultancy field.

Environmental management

42. The effects of desertification in the Gambia are less dramatic than those in other Sahelian countries. Nevertheless, the deterioration of the country's natural environment is contributing to a steady decline in the quality of life. In recent years, the Gambia has experienced a steep reduction of forests and degradation of rangelands due to overgrazing and frequent bushfires, with the result that feed supplies in some areas are no longer adequate to support livestock.

43. To prevent further desertification - and to restore rangelands and feed supplies - a UNDP-supported project was undertaken in 1986 in the districts of Niamina Dankunku and Niamina West, with a combined population of nearly 10,000 people and a large number of cattle, goats, sheep, donkeys, horses and oxen. Through a combination of rangeland management, improved water supplies, new feed storage facilities, bushfire prevention and tree planting schemes, livestock deaths have been considerably reduced and bushfires have been almost completely eliminated. Moreover, the project was carried out with the full participation of 54 villages, which contributed nearly 22,500 days of work and have now organized local committees to see that the results of the project are sustained. A pilot dairy processing unit is being set up and training for farmers and community leaders continues. Two neighbouring districts have requested government support for similar assistance.

Multi-sectoral education and training

44. The partnership between UNDP and the United Nations Volunteers (UNV) programme has proved of great benefit in Africa. UNV furnishes a highly flexible way of providing technical assistance and has been at the forefront in the promotion of South-South co-operation.

45. In the Central African Republic a UNDP multi-sectoral education and training project executed by UNV has been operating since 1985. Volunteers introduced to the country from other parts of Africa include five science teachers, five statisticians, three civil engineers, two garage mechanics and two computer experts. The results have included auxiliary science teaching in the lycées of M'Baiki, Sibut, Bozoum and Mobaye, improved use of statistics in economic planning, and the setting up of a computerized data base on gold and diamonds. The project is expected to have a multiplier effect, since national counterparts trained by the volunteers will, in their turn, train other national personnel.

Upgrading urban facilities

46. In many parts of Africa, inadequate urban infrastructures and heavy migration to the cities have resulted in poor and unhygienic living conditions. Burundi, although one of the world's least urbanized countries, has experienced increasing pressure on its capital, Bujumbura, which has been absorbing 6,000 new inhabitants every year. This has resulted in the appearance of unplanned slum areas, such as Musaga on the outskirts of the capital, which by 1978 had some 8,500 inhabitants living in extremely unhealthy conditions.

47. From 1978 to 1989 UNDP assisted the Government in carrying out an urban improvement project in Musaga, through the United Nations Centre for Human Settlements (UNCHS/Habitat) and the United Nations Capital Development Fund (UNCDF), with cost-sharing from the Government of Switzerland during the second phase of the project. Results of the project include extensive new housing, road and drainage networks, a piped water supply system, street lighting, a health centre (financed through bilateral aid from the Netherlands), a community centre, a sports field and a market-place with service buildings. The result has been a marked overall improvement in sanitation and general living conditions.

Cultural heritage preservation

48. Preservation of Africa's cultural heritage has in most countries tended to be given a lower priority than economic development. Yet the cultural dimension can be of great importance to a country, not only in terms of national identity but also as a source of tourist revenue. A case in point is Kenya, where prehistoric sites in the Rift Valley have yielded a unique record of human evolution. These sites are now being threatened by agricultural development, urban expansion and the proliferation of industry. Furthermore, lack of funds and experienced staff make it difficult to maintain research and exhibition facilities.

49. To counteract this threat, the administration of the National Museums of Kenya is encouraging cultural tourism in the country and at the same time improving its scientific and conservation capacities and organizing exhibitions. UNDP has been assisting the National Museums of Kenya in a project at Koobi Fora in northern Kenya, one of the world's most important palaeoanthropological sites, rich in fossils and stone tools. Access and accommodation for tourists and researchers are being upgraded, and museum and exhibit facilities improved.

## III. LATIN AMERICA AND THE CARIBBEAN

50. This region, beset by the burdens of external debt, critical poverty, drug trafficking, civil conflict, and pressures to conserve its environment, took important steps in 1989 to unite in facing these problems, with UNDP playing a substantial role.

51. In Central America, UNDP began to implement the Special Plan of Economic Co-operation for Central America (PEC), in close collaboration with five Central American Governments (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua), regional institutions, international organizations and donors. UNDP approved 21 regional projects at a cost of $11.2 million, of which $7.5 million was financed from UNDP's Special Programme Resources and the balance through co-financing. These projects helped to create the technical documentation needed to mobilize resources for investment and for large-scale technical co-operation projects, and to strengthen national and regional institutions. Governments placed high priority on programmes for uprooted populations, electricity, agricultural and telecommunications sectors, reactivation of the Central American Common Market and strengthening of the Central American Bank of Economic Integration. As of 31 December 1989, donor pledges and estimates for the PEC programme totalled over $700 million, including Italy's $115 million commitment to the Programme of Assistance to Displaced Persons, Refugees and Returnees (PRODERE) and $140 million from the European Economic Community (EEC) to boost intraregional trade. Pledges by donors were tied to progress in the regional peace process, democratization and economic reform.

### Uniting on the environment

52. In November 1989, President Oscar Arias of Costa Rica and a group of prominent political, economic and scientific leaders of the region met in New York. Their mission was to draw up a common approach to the vital issue of balancing environmental needs and conservation of natural resources with the development needs of Latin America and the Caribbean. The Commission for Latin America and the Caribbean on Development and the Environment, sponsored by UNDP and the Inter-American Development Bank, was formed. The Latin American leaders urged that the region seek "a major financial contribution from industrialized countries and rapid and growing technology transfer". They called for an early North-South summit to discuss "a common agenda of mutual self-interest" for the region.

### Emergency assistance

53. In the Caribbean, UNDP provided emergency assistance to Jamaica, the British Virgin Islands, Dominica, Montserrat, and Saint Kitts and Nevis, all of which were badly hit by Hurricane Hugo in November 1989. In the case of Montserrat, which suffered particularly severe damage to infrastructure, UNDP provided additional assistance under a project designed to introduce hurricane-resistant construction techniques in housing rehabilitation. The UNDP office in Barbados co-operated closely with UNDRO and with the Pan Caribbean Disaster Preparedness and Prevention Project, located in Antigua and Barbuda, in the co-ordination of international disaster relief.

The Caribbean Project Development Facility

54. The Caribbean Project Development Facility, which began its activities in 1982, assists entrepreneurs in developing suitable private sector projects and in mobilizing necessary financing. Since its inception it has helped to prepare 82 business proposals in 19 countries with a total investment value of $242 million. Of these, 46 projects have secured $98 million in financing. They include investments in hotel construction and expansion, furniture manufacturing, food processing, ceramic tile production, fertilizer production, sawmill expansion, cultivation of cut flowers and winter vegetables and the building of shipping facilities.

55. The Facility, which is managed by the World Bank/International Finance Corporation (IFC), is funded by UNDP and other donors, including the United States of America, Canada, the Federal Republic of Germany, the Netherlands and the Inter-American Development Bank. The Facility benefits from an advisory committee composed of representatives from the private sector, the World Bank/IFC and UNDP.

Tapping geothermal energy

56. Saint Lucia is seeking to meet its electricity needs and save on imported oil by harnessing geothermal energy. In 1988, an exploration team drilling near the Pitons mountains in Saint Lucia struck an underground reservoir containing highly pressurized steam that could, if properly exploited, revolutionize Saint Lucia's electricity production. UNDP administered the drilling project, which was funded by a $10 million grant from the United Nations Revolving Fund for Natural Resources Exploration (UNRFNRE) and the United States Agency for International Development (USAID).

57. Converting the geothermal resource into electrical energy will involve drilling more holes into the volcanic area. The released steam can then be used to drive turbines linked to the island's electricity grids. The one well that has been drilled so far could boost the island's 15-megawatt electricity capacity by a third. But the Government is also hoping to drill additional wells and put in a large 10-megawatt power plant.

Promotion of food security

58. Fifty per cent of the population of the Dominican Republic consists of farmers, and the major share of the country's export earnings comes from agriculture. The nation increasingly imports agricultural products for its own consumption, however. At the same time, home production of certain traditional foods such as roots and tubers has dropped. The net result is a less nutritious diet and higher food prices, making many foods inaccessible to the poorer sections of the population. UNDP was called in with FAO in 1987 to help the Government to increase domestic food security.

59. Five food-raising projects were formulated under the UNDP/FAO programme. One of these, planting rice over an area of 5,000 hectares, has already begun, and results so far have been encouraging. Budgets have also been approved for three projects involving basic food items such as plantain, red beans and yucca, and for

a project to grow African palm for palm-oil. In addition, United Nations agencies and government departments joined forces to create a computerized data base covering the production, credits, costs, prices and exports of the nation's 27 most important food products.

Overcoming the shortage of brainpower

60. Since its independence in 1966, Guyana has experienced a brain drain of skilled technical, administrative and managerial professionals. The Government and UNDP have collaborated in recent years on three separate approaches to strengthen the technical and managerial capacity of the country. In 1982, expatriate specialists of Guyanese origin were invited to return to the country for short-term assignments under UNDP's programme known as TOKTEN - the Transfer of Knowledge through Expatriate Nationals. Twenty-five TOKTEN assignments were undertaken in 1989.

61. Four years ago the United Nations Volunteers (UNV) programme began to lend expertise requested by the Guyanese Government to increase productivity and strengthen institutions which have been affected by the emigration of Guyanese professionals. The number of volunteers rose from 10 in 1988 to 16 in 1989 and is expected to rise to 31 in 1990. UNV is mainly involved in macro-economic management.

62. In yet another attempt to combat the Guyanese brain drain, UNDP has been supporting the Institute of Applied Science and Technology since its opening in 1980, helping with overseas training and the establishment of a research and development capability. The Institute set up a "business incubator" following a workshop in late 1988. Twenty-five entrepreneurs were selected to participate in the exercise, which provides expert advice and allows budding businesses to share overheads and services.

Strengthening social services

63. The Government of Argentina asked UNDP to help to improve the administration of social services, which, according to a World Bank study in 1986, required a great deal of attention. Average household incomes declined by 20 per cent in real terms between 1974 and 1985, while income distribution became more skewed. Moreover, services that benefited low-income groups, such as primary education, public hospitals, preventive health care and slum improvement, had deteriorated severely. The World Bank and the Governments of Argentina and Japan are supporting UNDP's efforts to improve policy making and the delivery of services.

Grass-roots enterprise

64. Achieving economic self-sufficiency often means moving one or more steps up the production ladder to make a finished product instead of merely supplying the raw material or an intermediate product. When members of an informal neighbourhood women's group in Timby, Brazil, discovered that their tapestries were finished and sold by nearby factories for four times the price paid to the women, they joined together to finish the tapestries on their own. They sought and received financial support from the United Nations Development Fund for Women (UNIFEM) and UNDP,

working through a non-governmental organization, Casa da Mulher do Nordeste (North-east Women's House). The women are now selling their tapestries at market price, and have thus increased their incomes and living standards, including levels of nutrition and health.

65. In Guatemala, an employment project is targeted at small urban businesses or "micro-enterprises". It is estimated that there are some 40,000 small, unregistered businesses in Guatemala which could be made bigger and stronger, and could help to solve a problem common to much of Latin America - urban under-employment. The project uses six NGOs located in Guatemala City to assist the entrepreneurs. To qualify for help, a business must be at least two years old, have two to seven employees and maximum working capital of less than $45,000. Those with the potential for maintaining a 10 per cent annual growth in profits receive a loan averaging $1,300. In the first year of the project, 92 per cent of the $4.7 million in loans was repaid on time, better than the national average for commercial loans. A government official has estimated that it costs three times as much to create a job in the formal sector than in the informal micro-enterprise programme.

66. UNDP has helped Paraguay to cope with the fact that over the past seven years the urban labour force has grown from 37 per cent of the total force to nearly 50 per cent at the same time that urban employment opportunities have been deteriorating. In 1985, bilateral assistance helped small businesses in the capital city of Asunción to gain small credit loans and receive basic management training courses. In June of 1989, UNDP, working through ILO and a non-governmental organization, the Paraguayan Foundation for Co-operation and Development (FUPACODE), expanded the programme to other cities. In six months, 1,465 credits were extended to "solidarity groups" of entrepreneurs in the same activity, providing a total of $717,204 of expansion capital. Training courses were developed for the new beneficiaries, and national personnel were trained to support the extended programme.

Low-cost, self-help housing

67. Costa Rica has an urgent need for 200,000 low-cost homes in both urban and rural areas. In 1987 the Government's Ministry of Housing launched the National Bamboo Housing Project with support from UNDP and the Netherlands. The project, executed by UNCHS and ILO, uses the fast-growing bamboo in place of more expensive and ecologically valuable timber, thus providing a material that is light, flexible and easy for women and children to handle in self-help home building. Early experience has shown that houses which would cost $5,000 made of traditional cinder block or wood and plaster can be made of bamboo for between $2,000 and $2,400. So far 200 homes have been built.

Volcano monitoring

68. Volcanic eruptions have occurred in Saint Vincent twice this century. Rising 4,000 feet over the island, Soufrière volcano killed over 2,000 in 1902 and erupted again in 1979 causing extensive damage to crops. The following year, the Government turned to UNDP for help in launching a project to monitor Soufrière's

activity continuously. The island has now installed an early-warning data analysis and alarm system costing $540,000.

69. Seismographic signals are relayed to the region's volcano monitoring headquarters in Trinidad, 200 miles away. The Seismic Research Unit of the University of the West Indies then analyses the transmissions on a special computer system provided through the project. In addition to monitoring Soufrière in Saint Vincent, the Unit tracks all volcanic activity in the eastern Caribbean and collects data from a seismograph network of 30 stations in 14 islands.

70. This is an example of how UNDP funding has been put to use for the benefit of the entire region. Analysis which previously required days to compile now takes only seconds, giving scientists a vital edge in the race to save lives. The experience of UNDP in the Caribbean has been applied to other volcano monitoring programmes in Ecuador and Colombia.

## IV. THE ARAB STATES AND EUROPE

71. Providing food security continued to be a major thrust of UNDP's work in the Arab region, where only 13 per cent of the total land surface is arable and agricultural production consistently lags behind population growth. Closely related were efforts to optimize the use of land and water resources and to protect the environment. Emphasis was also given to educating and training large numbers of men and women for jobs ranging from handicrafts production to the operation of state-of-the-art communications technologies. Programmes for economic diversification received support as well.

72. Transfer of technology was the dominant theme in the 10 European countries UNDP supports. High-level consultants, equipment and fellowships provided in such crucial fields as agriculture, medicine, informatics and remote sensing enabled these countries to apply advanced techniques while saving scarce foreign currency. In keeping with political changes in the region, support was given to several Eastern European countries in their moves towards more market-oriented economies.

73. Arab and European Governments and institutions have developed many fruitful linkages. This collaboration was given a boost in 1989 through UNDP-supported seminars and projects to promote a sharing of experience in photovoltaic energy systems, women in development, and aquaculture.

### Supporting new settlers

74. Most of Egypt's 52 million people live on 4 per cent of the land, in the Nile valley and delta, which has also traditionally been the only agricultural land. Egypt imports more than half its food requirements and 75 per cent of its wheat.

75. Economic exploitation of former desert lands, newly reclaimed with Nile water stored by the Aswan dam, is a corner-stone of the Government's agricultural development strategy. In an area 150 kilometres north-west of Cairo, the massive Noubaria Development Scheme will increase agricultural land by 875,000 hectares and generate 75,000 jobs for new settlers.

76. UNDP, with FAO, supports Egypt's efforts to help the new settlers with irrigation and water management, agricultural mechanization, fruit and vegetable production and livestock improvement. Nurseries for windbreaks have been established and credit and marketing schemes designed. Adoption of a system that provides crops with just the right amount of pre-fertilized water has increased yields by 40 per cent. Wheat is being grown in the desert for the first time.

77. A core of extension specialists able to meet the challenges of desert development is in place. KHADRA, a national youth group also assisting the settlers, has received a $25,000 grant from the UNDP Partners in Development programme to promote biogas energy through a demonstration project in one village.

Training agricultural personnel

78. Saudi Arabia has made huge investments to develop arable land and water resources, introduce modern farming practices and equipment and train agricultural personnel. For more than a decade, UNDP and FAO have supported four agricultural training centres which have trained over 2,000 people in general agriculture as well as specialties including irrigation and drainage, plant protection, soil and fertilizers, beekeeping, poultry production and the operation and maintenance of farm machinery.

79. Recent agricultural expansion, however, has further increased the need for technical personnel. A recent survey showed that 80 to 90 per cent of the staff operating agricultural projects are expatriates, and that the Kingdom requires 5,600 agricultural experts. Thus, UNDP and FAO continue their support for on-the-job training and short-term courses abroad.

80. During the first nine months of 1989, 416 agricultural engineers and 181 agricultural technicians from the Ministry of Agriculture and Water were trained in different specialties. These professionals now design, implement and evaluate agricultural training programmes, replacing international experts.

Cutting post-harvest losses

81. Democratic Yemen estimated that post-harvest losses of domestically produced and imported foods from 1981 to 1986 were as high as 20 per cent for grains and 50 per cent for fruits and vegetables. The total yearly value of such losses was over $4 million for the major locally-produced food crops.

82. UNDP provided $712,000 in equipment and FAO technical assistance for the establishment of a Post Harvest Centre, constructed with a $635,000 grant from the Arab Gulf Programme for the United Nations Development Organizations (AGFUND). In three years, advice provided by the Centre helped to reduce fruit and vegetable losses to only 3.4 per cent. Further UNDP support is planned to strengthen the links between the Centre and extension services.

Conserving soil and water

83. Tunisia aims to protect 1 million hectares of soil from erosion by the year 2000. UNDP and FAO support for soil and water conservation training is helping the Government to realize this goal. In addition to implementing 13 conservation works, seminars on conservation have been held for 70 participants. Eleven workshops and training sessions have been conducted for groups of up to 36 participants each, and 28 technicians have been sent abroad to study the conservation experiences of other developed and developing countries.

Investigating deep ground water

84. Morocco gets 30 per cent of its water from underground sources. This amounts to 1 billion cubic metres of water, of which only 8 per cent is pumped from deep aquifers. The Government is studying the deep water extraction potential of four basins in different parts of the country with $1.3 million in UNDP and United Nations Department of Technical Co-operation for Development (DTCD) technical support.

85. Six workshops held in Morocco covered techniques of deep drilling, water extraction, satellite imagery processing and analysis, statistical data processing, mathematical modelling of ground-water flows, and ground-water resource management. These techniques are now being applied by the Water Investigation and Planning Branch of the Ministry of Public Works. Extensive data were gathered, geological maps prepared, and various models developed for aquifers in each of the four basins.

86. The Government is carrying out further studies in the modelled areas to confirm various hypotheses on the behaviour of the aquifer systems. Boreholes already drilled will soon be used for water supply.

Upgrading technical education

87. The technical secondary schools of Somalia provide craftspersons and middle-level technicians with training in vehicle mechanics, construction, engineering, navigation and other skills needed by local industries. Until recently, however, the quality of the training provided had been unsatisfactory owing to overcrowded classrooms, poorly designed curricula, inadequate equipment and low-quality instructional materials.

88. Now a four-year project supported by UNDP and the United Nations Educational, Scientific and Cultural Organization (UNESCO) since 1987 has vastly improved technical training and prompted industries to seek the assistance of the Technical Teachers' College (TTC) in restructuring their own training programmes. The project established new departments for curriculum design and development, instructional media and in-service training at the TTC. The College also held 10 workshops on technical secondary schools curriculum design for teachers, representatives of local industries and Ministry of Education personnel, and 12 workshops on the preparation of instructional materials.

89. Eleven in-service training courses were held for 198 technical teachers, and seven teachers received fellowships to study curriculum design and instructional material development abroad. Equipment worth $400,000 was provided.

Equipping the disabled

90. Jordan has an estimated 183,000 disabled persons, but it has only 39 general education rehabilitation centres catering to fewer than 3,000 of them. Its 12 vocational rehabilitation centres serve fewer than 300 persons with disabilities.

91. UNDP and ILO have provided assistance for the training of 60 instructors and 25 directors and placement officers for the disabled. This assistance has also enabled Jordan's main vocational rehabilitation centre to establish placement and follow-up services. In other rehabilitation centres, equipment was provided to train the disabled in carpentry, shoe-making, book-binding, upholstery, motor mechanics, car body repair, metal and aluminum works, tailoring, cane work and brush making. Beginning in 1990, UNDP and AGFUND will jointly fund a two-year, $602,000 project to develop rehabilitation staff training capacities throughout the Arab world.

Learning with computers

92. Bulgaria has been experimenting with computer education in 30 elementary and secondary schools for 10 years, assisted by UNDP, UNESCO and the United Nations Industrial Development Organization (UNIDO). The goal is to prepare young people for the information age of computers and robots. Students begin by using the internationally accepted LOGO computer language to manipulate miniature toys they build with LEGO construction sets. They later apply computers to the study of language, mathematics and other subjects, and eventually learn to create computer programmes for miniature robots which are exact replicas of factory machines.

93. The programme is expanding to include the use of video, lasers and other advanced educational technologies. While Bulgaria makes its own personal computers, UNDP has provided additional equipment, technical consultants and fellowships for Bulgarians. Software is being developed at the Lenin Higher Institute of Mechanical and Electrical Engineering in Sofia and more than 1,000 teachers have received special training. Since 1985 Bulgaria has organized three international conferences on "Children in an Information Age" at which it has shared computer education experiences with other countries.

Promoting entrepreneurship

94. In October 1989 Poland, shortly before passing 25 new economic laws catapulting it into a market economy, was host to the International Forum of Small- and Medium-Scale Enterprises, sponsored by UNDP and UNIDO. The Forum attracted representatives from Bulgaria, Cyprus, Hungary, Malta, Poland, Turkey and Yugoslavia, as well as observers from several Arab, Asian and African developing countries and more than 100 Polish entrepreneurs.

95. Participants discussed prospects and problems of developing private enterprises, especially east-west joint ventures. Many Polish entrepreneurs spoke of lack of capital, high taxes, exorbitant interest rates, inefficient banking systems, non-functioning telephones and the absence of a commercial real estate market. Three additional workshops were recommended - one focusing on the regulatory and structural environment for small- and medium-scale enterprises, another dealing with venture capital and a third with privatization.

Harnessing solar energy

96. A seminar on photovoltaic energy sponsored by UNDP in Yugoslavia in September 1989 attracted planners and policy makers from 13 Arab and eight European countries. Under certain circumstances photovoltaic systems, which generate electricity directly from the sun's rays, could be economically used in both the Arab and European regions to provide electricity for rural health clinics, water pumps, village lighting and water desalination.

97. As a result of the seminar, participants set up a steering group to pave the way for a network of Arab and European institutions and experts to exchange data in this field.

---

UNITED
NATIONS

DP

Governing Council
of the
United Nations
Development Programme

Distr.
GENERAL

DP/1990/17/Add.2 (Part II)
23 March 1990

ORIGINAL: ENGLISH

SUPPORT

Thirty-seventh session
28 May-22 June 1990, Geneva
Item 4 (a) of the provisional agenda

# ANNUAL REPORT OF THE ADMINISTRATOR FOR 1989

## PROJECT RESULTS: GLOBAL AND INTERREGIONAL PROGRAMME AND SPECIAL FUNDS

## I. GLOBAL AND INTERREGIONAL PROGRAMME

1. The Division for Global and Interregional Programmes (DGIP) of the United Nations Development Programme (UNDP) has two complementary and interacting roles. The global programme supports research into development issues of world-wide importance, focusing mainly on sustainable agricultural production and health problems. The interregional programme disseminates and applies the results of research in a variety of sectors, such as fisheries, health, water supply and sanitation, urban management, human resources and energy. It also promotes co-operation among developing countries in sharing research and exchanging knowledge and skills. Both programmes receive support from bilateral donors and international organizations, as well as from UNDP core resources.

2. The mid-term review of DGIP activities in the fourth planning cycle was completed in January 1990. It concluded that, while most programmes are being implemented as foreseen, DGIP has also responded well to problems not clearly anticipated when fourth cycle plans were formulated. Such problems include the AIDS [acquired immunodeficiency syndrome] epidemic, debt management and environmental degradation.

### A. Agriculture

3. Nearly three quarters of the global programme resources of DGIP are devoted to agricultural research, aimed primarily at increasing food production. This research is linked with national crop improvement programmes in developing countries and is conducted through a network of international agricultural research

centres, which DGIP helped establish. In 1989, UNDP supported 12 projects carried out by these centres. UNDP provided $US 10.5 million for this purpose, and a further $240 million was contributed by other donors.

4. To date, more than 6,000 scientists and technicians from developing countries have been trained through the global agricultural projects of DGIP. Through these experts, close links are maintained between the international research centres and corresponding institutions in developing countries.

5. Research supported by DGIP in the centres includes the testing of improved varieties of sorghum, millet, rice, maize and wheat in different ecosystems. One centre carrying out such research is the International Centre for Maize and Wheat Improvement (CIMMYT) in Mexico. UNDP sustained assistance to CIMMYT over the past 13 years has contributed to a major breakthrough in plant breeding and genetics with the development of quality protein maize containing two amino acids that are lacking in ordinary maize. This new maize variety has been tested in 38 locations around the world, and is ready for wide-scale dissemination. Its introduction in areas where maize is a staple diet will greatly enhance nutrition and reduce the incidence of certain malnutrition-related diseases.

6. With $22 million in UNDP support, the International Centre of Insect Physiology and Ecology (ICIPE) at Nairobi, has developed an effective technique for controlling African trypanosomiasis. This disease, which each year kills thousands of livestock, is carried by the tsetse fly, found throughout one third of Africa. The centre has pioneered the use of fly traps of brightly coloured cloth with conical roofs. The flies are attracted to the colours and the chemically reproduced smell of cow urine which is placed in tins beside the traps. Since 1987, these traps have resulted in a 99 per cent reduction of the tsetse population in the test area, which covers 150 square kilometres in the Nguruman region of Kenya.

7. In a related project, the International Laboratory for Research on Animal Diseases (ILRAD) in Kenya is developing breeds of cattle resistant to trypanosomiasis. Breeding trials are being conducted in close collaboration with the International Livestock Centre for Africa (ILCA) in Ethiopia.

8. The UNDP is investing $5 million in a new three-year global research project, launched in 1989, which aims to develop environmentally acceptable methods of desert locust control. This project was launched in response to concern about the harmful ecological effects of chemical pesticides traditionally used to control locusts. It is being co-ordinated from the headquarters of the Food and Agriculture Organization (FAO) in Rome.

## B. Water, sanitation, health

9. Under the banner of the International Drinking Water Supply and Sanitation Decade (IDWSSD), 1981-1990, UNDP and partner United Nations organizations and agencies are engaged in a campaign to provide the developing world with clean drinking water and adequate sanitation. The joint UNDP/World Bank Water and

Sanitation Programme continues to play a key role in this effort. By the end of 1989, UNDP had committed a record $375 million to water and sanitation activities and was playing a leading role in the Decade, due to end in 1990. The DGIP has been a major supporter of Decade projects, in collaboration with the International Children's Fund (UNICEF), the World Health Organization (WHO), the World Bank and bilateral donors. The DGIP is also devising strategies and mobilizing resources for improved services in the 1990s through the Collaborative Council, a group of more than 40 donors chaired by UNDP.

10. As part of the UNDP/World Bank Water and Sanitation Programme, a low-cost sanitation project was launched in 1987 in response to the difficulty of providing conventional sanitation services in poor areas, particularly in rapidly expanding urban slums. The project has concentrated on the design and application of alternative solutions, including improved pit and pour-flush latrines and shallow sewers. Countries where these systems are being applied include Botswana, Ghana, India, Lesotho, the Philippines and Zimbabwe.

11. The UNDP/World Bank International Training Network for Water and Waste Management opened three new centres in 1989, bringing the total number of centres to nine.

12. The UNDP programme Promotion of the Role of Women in Water and Environmental Sanitation Services (PROWWESS) has extended its operations to 20 developing countries in four regions. The programme aims to improve water and sanitation services by involving communities, especially women, in the design and implementation of systems. While demonstrations remain an important part of the work of PROWWESS, in 1989 major emphasis was placed on institutionalizing the lessons that have been learned. For example, it was agreed to include training in community participation and women's involvement in the UNDP/World Bank International Training Network. Advisers in PROWWESS methods are also to be placed with the regional groups operating under the UNDP/World Bank programme. Meanwhile, demonstration work continued to expand. In 1989, a demonstration project was begun in Nigeria, funded with $3 million from UNDP and $775,000 from the Netherlands Government.

13. The WHO Diarrhoeal Diseases Control (CDD) Programme of WHO, to which DGIP contributed $3.5 million between 1987 and 1989, has continued to achieve significant breakthroughs. Research conducted in 1989 at centres connected with the programme included the testing of vaccines against rotavirus, a virus responsible for up to 20 per cent of the more than four million annual deaths from diarrhoea world wide. Field trials of these vaccines have so far shown promising results. Tests were also carried out on typhoid and cholera vaccines, and an improved formula was developed for oral rehydration salts as a treatment for diarrhoea. With DGIP support, the International Centre for Diarrhoeal Disease Research in Bangladesh is studying the complex interrelationships between diarrhoea, maternal and child health, nutrition, fertility, water supply, sanitation and domestic hygiene.

14. The DGIP and WHO also play leading roles in combating the spread of AIDS through the Global Programme on AIDS, begun in 1987. More than 130 countries now

receive support through the Programme, to which UNDP contributed over $20 million for the period 1987 to 1990. There were an estimated 600,000 cases of AIDS at the end of 1989. By the year 2000, the toll is expected to exceed six million. In 1989, responding to sharp increases in the rate of infection, UNDP approved $2.4 million to be applied to three regional projects, in Africa, the Arab States and Asia and the Pacific. The projects will help Governments develop national anti-AIDS strategies and assist in training and education.

## C. Fisheries

15. Taking advantage of recent advances in fish culture technology, DGIP launched a new project in 1989 on genetic improvement of tilapia fish. The project will release its first findings in 1990. The research is being carried out in the Philippines by the Centre for Living Aquatic Resource Management, in collaboration with the Government of the Philippines and the Agricultural University of Norway (NORAGRIC).

16. In 1989, DGIP worked with a steering committee composed of representatives of UNDP, the European Economic Community (EEC), FAO and the World Bank to produce a multi-donor diagnosis and strategy for international co-operation and fisheries research. The study, to be published in April 1990, outlines a strategy for international initiatives aimed at improving the quality of research in fisheries management and development. The estimated total cost of the study ($800,000) will be shared among donors, who will jointly review the strategy at the Second Fisheries Development Donor Consultation, to be held in Paris in July 1990.

## D. Human resources

17. Human resources development is an integral component of all programmes supported by DGIP. The Division is strengthening its efforts to enhance the capacity of institutions and individuals to plan and manage more effectively the application of research findings in key sectors such as health, agriculture and education.

18. The Special Public Works Programme (SPWP) of DGIP supports employment-generating rural development projects in least developed countries (LDCs). By the end of 1989, the programme involved 22 LDCs and more than 10 donors. There was active participation by three special funds administered by UNDP: the United Nations Capital Development Fund (UNCDF), the United Nations Volunteers (UNV) and the United Nations Sudano-Sahelian Office (UNSO). In the period 1987-1989, UNDP contributed $1,420,000 to SPWP from the Special Measures Fund for the Least Developed Countries (SMF). In Nepal, SPWP is helping to manage more than $100 million in credits for irrigation development from the Asian Development Bank (AsDB) and the World Bank. In 1989, SPWP drew up programme proposals for several countries, including a preliminary plan for reconstruction in Afghanistan. It also produced training materials on activities ranging from stone paving to the preparation of work plans. The project is now concentrating on building up the capacities of developing countries to manage their own public works programme and

on promoting greater participation by local institutions and local governments. Over the next two years the project will also work on the application of the SPWP approach in poor urban areas.

## E. Trade, finance and investment

19. A UNDP/World Bank Trade Expansion Programme (TEP) was initiated in mid-1988 in the belief that many developing countries, having decided to reform their trade policies, might well require continuing advice on the implementation of the reforms. Demand for the programme's services continues to grow substantially. To date, country reports have been issued for Guatemala, Mali and Poland. The report on Poland has had a particularly important impact on recent reform efforts in that country. The TEP has also initiated work in Madagascar, Morocco, Uganda and Uruguay and the programme is to be extended to Kenya. Several other countries have expressed an interest.

20. An increasing number of projects supported by UNDP are designed to help Governments improve their external debt management and related policies. In 1988, DGIP appointed a team of independent experts to take a broad look at the needs of developing countries for assistance in this area. The team visited 14 developing countries and consulted United Nations organizations and agencies, donor governments, financial institutions and other public and private organizations concerned with the problem. Their report, entitled Debt Management and the Developing Countries, was published in July 1989. The report recommends that UNDP treat external debt management as a priority area and take the lead in arranging better co-ordination among technical assistance agencies active in support of external debt management.

21. As part of its activities in support of economic co-operation among developing countries, DGIP helped to establish the Association of State Trading Organizations (ASTRO). The group currently has a membership of more than 60 state-owned and private companies. A UNDP grant of $255,000 for 1989 and 1990 led to further contributions totalling $1.75 million from ASTRO members, the United Nations Conference on Trade and Development (UNCTAD) and the International Trade Centre (ITC).

## F. Environment

22. In 1988, DGIP commissioned a major study on the financing of conservation in the developing world. The study was carried out by the World Resources Institute (WRI), based in Washington, D.C., with the support of UNDP, the Governments of Canada, Norway and the United States of America and several prominent foundations. The resulting report, entitled Natural Endowments: Financing Resource Conservation for Development, was issued in September 1989. It contains a number of proposals for consideration by the world community, including the creation of an international environmental facility to support natural resource conservation projects. Other proposals in the report include: a pilot investment programme, Ecovest, to promote sustainable use of resources; the linking of sector policy

reforms to resource conservation and debt reduction; and a global environmental trust fund financed by levies on greenhouse gas emissions. The report's findings and recommendations are currently being explored by the World Bank in close consultation with UNDP and the United Nations Environment Programme (UNEP). A pilot Ecovest scheme has already been established through the Overseas Private Investment Corporation (OPIC) of the United States.

23. The link between energy and the environment has increasingly come to preoccupy policy makers in both developed and developing countries. The energy sector is one of the largest contributors to environmental degradation, and therefore any improvement in the efficient use of energy benefits the environment. Furthermore, studies show that investment in energy efficiency tends to be more profitable than commensurate investment in increasing energy supply. The Energy Sector Management Programme (ESMAP), sponsored by UNDP and the World Bank and supported by some nine donors, is playing an important role in the global effort to increase energy efficiency. By the end of 1989 energy efficiency and conservation activities sponsored by ESMAP were under way or planned in some 40 developing countries. Moreover, ESMAP has recently launched a major initiative to promote the increased use of natural gas, which many developing countries possess in significant quantities. Wider use of this relatively clean fuel would bring positive environmental results.

## II. ASSOCIATED FUNDS

### A. United Nations Capital Development Fund

24. The UNCDF provides capital assistance to LDCs for small-scale projects designed to bring early and direct benefits to low-income groups. In 1989, UNCDF had 237 on-going projects totalling approximately $445 million in value.

25. In Nicaragua, UNCDF is supporting a private concern which manufactures school furniture, door frames, floor-boards, ceiling beams and other wood products. The business is entirely managed and largely staffed by women. Sixty women have been trained as carpenters by the company. A day care centre is being set up for children of employees.

26. In Cape Verde, a project, being carried out by the government National Poultry Company, assisted by UNCDF, is stimulating private sector production of poultry by distributing one-day-old chicks to small poultry farmers. In addition, by providing a central storage facility, abattoir and mini-market, UNCDF has enabled the National Poultry Company to reduce its production costs and lower poultry and egg prices. This in turn is compelling private producers to improve their competitive efficiency.

27. In the mountainous parts of Bhutan, 138 suspension bridges were built as part of a project supported by UNCDF. Under the project, national construction teams received training in bridge-building. The new bridges have given farmers year-round access to distant markets and have improved access to health centres and schools.

28. In the Central African Republic, UNCDF has provided construction materials, tools and vehicles for a rural development project which is helping villagers to construct their own community facilities. To date, six pharmacies, five health centres, a poultry farm and an equipment storage facility have been built by villagers. The project has also established a revolving fund to promote small-scale, income-generating projects initiated by local women.

29. In many cases, UNCDF and UNDP projects complement each other, with capital assistance being provided by UNCDF and technical support by UNDP. One example is a project in Fouta-Djallon, southern Guinea. Under a prior government-assisted pilot project, farmers were trained in land preparation techniques and ways of marketing their produce more effectively. In 1987, to harness the experience gained by farmers, UNCDF initiated a project aimed at increasing agricultural production and at providing support to community development activities. UNDP is providing technical support to farmers to improve irrigation on 575 hectares. Construction work on irrigation canals, water supply points and three rural health centres is being carried out by personnel trained with UNDP assistance. The UNCDF is financing the purchase of the necessary agricultural equipment, and providing funds for seasonal credits to individual farmers and to farmers' and women's groups for food processing and other economic activities.

30. Sayaboury Province in Laos is one of the most isolated parts of the country because of bad roads and the lack of any nearby port on the Mekong River. With financial support from UNCDF and technical assistance from UNDP, 133 kilometres of road between Prabang and Sayaboury are being upgraded. In addition, a new port is being built by the Government of Australia. The UNCDF is providing a ferry and other equipment for the port. Local staff are being trained to repair and maintain equipment provided by UNCDF. These developments will improve access to the province and will allow better marketing of agricultural and forestry products.

## B. United Nations Sudano-Sahelian Office

31. The mandate of the United Nations Sudano-Sahelian Office (UNSO) is to assist 22 countries of the Sudano-Sahelian region of Africa in combating drought and desertification. UNSO supports the rehabilitation and sound management of natural resources and the promotion of sustainable economic development. Over $37 million was mobilized in 1989 to finance programmes and projects in the field of drought and desertification control. Projects initiated in 1989 include projects in deforestation control, rangeland and water resource management, soil protection and sand dune fixation.

32. Much of the work of UNSO in 1989 was concentrated on establishing governmental advisory and co-ordinating units to combat desertification. In the United Republic of Tanzania, UNSO supported the National Plan to Combat Desertification. Maps were drawn up and a data base was created. Following a Round Table consultation in Mali, UNSO is helping the Government to implement desertification control policies. Through consultations with donors, UNSO and UNDP have succeeded in forging an integrated approach to natural resource management, and have improved the co-ordination of financial resources for desertification control.

33. UNSO continued to support the Ecological Monitoring Centre in Senegal. Using satellite, aircraft and field surveys, the Centre produces maps and data on the location and distribution of livestock and wildlife, vegetation cover, bush fires and water erosion. The results are used to aid natural resource management.

34. An important aspect of the work of UNSO is promoting more efficient use of fuel. In the Sudan, with UNSO support, more than 500 tons of fuel briquettes were produced for industrial and home use. In the Gambia, UNSO recently assisted a project to increase production of fuel-saving cooking stoves. More than 40,000 stoves were distributed in 1989.

35. In Senegal, UNSO is supporting a soil protection and sand dune fixation project. More than 950 hectares of dunes have been fixed, 125 kilometres of wind-breaks have been established and 600 hectares of soil have been treated to increase fertility.

36. In Mali, UNSO contributed $1.8 million towards the second phase of a project to rehabilitate the Lake Faguibine system. The aim is to restore the viability of five lakes and surrounding catchment areas of the system for fishing, livestock-raising and food cultivation. The project includes the clearing of channels feeding into the system and the creation of a land-use plan based on studies of physical and economic conditions in the area.

37. The UNSO contributed $1.5 million towards a project to restock the gum arabic belt in Darfur in the Sudan, an area which had been partially deforested by drought and fuel gathering. The project aims to enrich 1,000 hectares of existing gum arabic plantations and restock an additional 25,000 hectares.

38. In Burkina Faso, an UNSO project is enhancing rural energy supplies by promoting village wood lots and community forestry in the provinces of Boulkiemde and Sanguie. The project has established more than 100 kilometres of wind-breaks. Support has been extended to 100 nurseries to promote the planting of trees.

## C. United Nations Volunteers

39. The United Nations Volunteers (UNV) increased their global reach in 1989, with 2,355 UNV specialists serving in 108 countries. The major emphasis was given to LDCs, where 83 per cent of the UNV specialists were assigned.

40. Africa received nearly 50 per cent of the volunteers with 881 UNV specialists assigned to 43 countries. Botswana was host to 82 volunteers, the largest contingent, with most serving in education, agriculture and primary health care.

41. In Sierra Leone, four UNV engineers assigned to a rural works programme executed by the International Labour Organisation (ILO) helped rural communities build health centres, primary schools, wells, feeder roads and a bridge. Three new rural markets were established.

42. In a national programme aimed at food self-sufficiency in Sierra Leone, four UNV specialists provided expertise for an inland swamp reclamation programme. The UNVs helped communities to use local materials to build drainage and irrigation systems. More than 6,000 farmers were trained in double and triple cropping practices.

43. A UNV in the Congo trained 38 beekeepers as part of a pilot ILO project supporting small and medium business enterprises. The project showed a 100 per cent return on the initial investment for the first year and won an award from the Congo Ministry of Commerce and Small Enterprises.

44. In Asia and the Pacific, 553 UNVs served in 28 countries during 1989.

45. In Bangladesh, seven UNV medical specialists, assigned to a local hospital serving 2.5 million rural residents, trained 22 junior doctors and more than 200 medical and paramedical workers.

46. In Pakistan, eight UNV specialists working with the Office of the United Nations High Commissioner for Refugees (UNHCR) and the World Food Programme (WFP), assisted in managing the distribution of food aid to Afghan refugees. They also helped monitor efforts to combat malnutrition in children.

47. In Papua New Guinea, a UNV foundry management specialist helped to increase the revenue of the Hanuacast foundry by two thirds. Workers supplying the scrap to the foundry increased their revenues by 75 per cent.

48. In Cyprus, two UNV architects are helping to carry out the Nicosia Master Plan to restore and revitalize the old city. The effort is helping to bring together the Turkish Cypriot and Greek Cypriot communities.

49. The UNV programme in the Arab States grew by two thirds in 1989, with 242 UNV specialists serving in the region.

50. A UNV agricultural specialist in Egypt has successfully designed and pioneered the use of plastic conduits for irrigation.

51. In Latin America and the Caribbean, 125 UNVs worked in 23 countries during 1989. More than 70 per cent served in the Caribbean.

52. A group of 24 UNVs, made up of doctors and paramedics, is working in Jamaica to help relieve a shortage of health workers. One of them is serving as Principal Medical Officer in the Ministry of Health. A UNV environmental engineer, working directly for the Prime Minister, has established a national environmental society, the first of its kind in the Caribbean.

### D. United Nations Revolving Fund for Natural Resources Exploration

53. The United Nations Revolving Fund for Natural Resources Exploration (UNRFNRE) continued its work of assisting mining and geothermal energy projects. The Fund

also continued its pursuit of two important long-term goals: more equitable geographic distribution of projects, and greater diversity in the type of minerals being sought.

54. The Fund signed its first replenishment agreement with the Government of the Philippines, covering deposits of metallurgical chromite ore on the island of Dinagat. Small-scale miners will be licensed by the Government to extract ore in the Fund's exploration area. The deposits are estimated at up to two million tons, with a potential ground value as high as $200 million.

55. The Fund completed a gold exploration operation in Peru and began preparing a final report to be submitted to the Government in 1990. The project located 250 million cubic metres of gold-bearing gravel.

56. In Honduras, the Fund finished drilling in the Yuscarán area, confirming the existence of gold and silver deposits with an estimated value of $150 million. The advanced stage of drilling in the Yuscarán area was co-financed by the Government of Italy. Preliminary drilling in Quita Gana will continue in 1990.

57. The Fund completed a drilling programme in Ghana, supported by the Government of Sweden, which investigated the feasibility of extensions to dormant gold mines. A report of the findings is due to be completed in 1990.

58. In China, field work began on the Fund's pyrophyllite project which received financial assistance from the Government of Italy. Geological mapping and sampling were carried out in Fujian Province.

59. In October 1989, the Fund's gold exploration project in Bolivia became operational. Mobilization of equipment is under way, and the construction of facilities and infrastructure has been initiated.

60. The final reports for the Fund's exploration projects in Côte d'Ivoire and Rwanda have been completed and will be submitted to the two Governments. The findings provide information on mineral potential in the exploration areas.

61. The Fund undertook negotiations for heavy mineral exploration in Sri Lanka, for gold drilling in the United Republic of Tanzania and Zimbabwe and for chromite exploration in Madagascar.

62. El Salvador, Guatemala and Honduras have agreed with the Fund to seek financing for mineral projects in the Trifinio region, which incorporates part of each of the three countries.

63. In the field of geothermal energy, the Fund assisted several countries during 1989. In St. Lucia, the Fund submitted the final report for its first geothermal project in the country and continued to assist the Government in attracting investment for the project. In China, the Fund continued to work on a geothermal exploration project in Yunnan Province. A similar project continued to be supported by the Fund in Nicaragua. At the request of the Government of Mexico, the Fund agreed to defer its geothermal exploration project near Guadalajara.

## E. United Nations Development Fund for Women

64. The United Nations Development Fund for Women (UNIFEM) has strengthened its collaboration with UNDP in the areas of programme development and training, as part of UNIFEM efforts to increase its strategic impact.

65. One example of the efforts of UNIFEM to contribute to the increased efficiency and productivity of rural women's work is a $328,371 project in Rwanda to provide training, access to credit and appropriate technology to women engaged in agriculture and other income-generating activities. Training programmes have been established in a variety of areas ranging from handicrafts production to livestock management and marketing.

66. UNIFEM has taken important initiatives to ensure the integration of women into the Critical Poverty Programme for Latin America and the Caribbean. The Fund hired a senior consultant who, in collaboration with other agencies, is developing a programme to be presented at the regional inter-governmental meeting scheduled for August 1990 in Guayaquil. UNIFEM chaired the Inter-agency Meeting concerning Women and Poverty in Latin America and the Caribbean, held at Santiago, Chile, on 4 and 5 December 1989.

67. In Honduras, UNIFEM is helping grass-roots organizations to improve the social conditions of lower-income families. It has helped the Honduran Government to plan and co-ordinate policies and programmes for integrating women into all national development efforts.

68. In Indonesia, UNIFEM is supporting a project for increasing the income of women in the fishery business. The project provides credit, managerial training and technical advice on fish processing and the reduction of post-harvest losses.

69. In Syria, UNDP and UNIFEM have helped set up two teaching centres for rural women. At present, 1,100 women are attending these centres, where the emphasis is on promoting literacy. In addition, the women receive vocational training in such activities as sewing, weaving and the processing of fruits, vegetables and dairy products. Another 1,100 women are scheduled to begin the same series of classes when the first group graduates in 1990. The General Union of Syrian Women has conducted a very successful campaign to make rural communities aware of the importance of literacy, and the classes are now over-subscribed.

## F. United Nations Fund for Science and Technology for Development

70. With developing countries seeking ways to make new technology available to small businesses, the United Nations Fund for Science and Technology for Development (UNFSTD) is responding to a growing demand for its services.

71. One of the ways in which the Fund gives support is through business incubators, usually established by Governments or universities. These provide many advantages for new technological ventures, including affordable space, shared office services, assistance in management and marketing and access to seed

capital. Business incubator projects supported by UNFSTD are under way in nine developing countries.

72. The technology incubation programme in China, initiated in 1988 by UNFSTD and the State Science and Technology Commission, has already established seven incubation centres. The aim is to create 2,000 enterprises in advanced technology.

73. A study carried out in India in October 1989 suggested that technology business programmes could be stimulated in a variety of ways. Industrial estates could promote small and medium enterprises, research institutions could encourage development of new marketable products and export processing zones could be used to attract capital for new industries.

74. In Thailand, a technology park is being planned with UNFSTD support. It will include a technology incubator and facilities for Thai joint technological ventures with Japan and the United States.

75. The first incubator in Trinidad and Tobago was inaugurated in February 1989 under the sponsorship of the Government and the Caribbean Industrial Research Institute. UNFSTD supported management training and financial analysis. In the Caribbean region, UNFSTD held workshops to explain the incubator concept in Barbados, Guyana and Jamaica.

76. The Technological Information Pilot System (TIPS), established with UNFSTD support, is a computer-linked information exchange dealing with business opportunities and technical products that have reached prototype or pilot stage. It also includes requests for technical assistance, trade opportunities and global procurement and consultancy tenders by the United Nations system of organizations. TIPS became a subscription service in April 1989, and its services are now widely marketed. Governments, professional organizations, private enterprises, research institutes and investors in nine developing countries participate in the exchange. Negotiations are under way with 15 additional countries intending to join the TIPS computer network.

77. At the Asian Institute of Technology at Bangkok, UNFSTD completed a four-year project to strengthen computer education, computing facilities and research. The highly selective master's programme has increased its enrolment from 25 to 40 pupils a year, drawn from 500 applicants. The Institute's computer curriculum has also been expanded to keep pace with changing technology.

78. The UNFSTD has been assessing the future demand for UNDP assistance in new and emerging technologies. In 1989, UNFSTD published two programme advisory notes (PANs) covering plant biotechnology, informatics and information technology. A third PAN on advanced materials is nearly completed. These PANs provide UNDP field offices with guidelines to review project proposals involving new technologies.

79. To assist UNDP field offices in obtaining prompt scientific and technological information, UNFSTD has begun to compile an information systems guide for UNDP field offices. Such a listing includes data banks and other resource services which are available within and outside the United Nations system of organizations.

80. The UNFSTD also manages a programme called the Transfer of Knowledge through Expatriate Nationals (TOKTEN). This programme maintains a roster of expatriates from developing countries, usually scientists and university researchers, who volunteer on a short-term basis to serve as specialists in their countries of origin. From the inception of TOKTEN in 1977 through the end of 1989, over 2,500 experts were fielded. In 1989, Malta and Viet Nam started TOKTEN projects. The programme was active in 27 countries during 1989.

81. Another UNFSTD programme, short-term advisory services (STAS), provides specialized advisers from the private and parastatal sectors of developed and developing countries to solve problems and provide technical advice in the commercial and service sectors of developing countries. The STAS advisers completed 70 assignments in 1989. The programme is currently active in 50 developing countries.

---